

#### 1776 — Independence Day — 1952

A look at the top of a flag pole today as we observe the anniversary of the signing of the Declaration of Independence reveals a reassuring sight to us. Our flag, with all its 48 stars and 13 stripes, flies proudly and serenely despite the trials and tribulations of the day. Let us all do our part to keep our colors free and strong for we are fortunate to be living in the "land of the free and the home of the brave."

# Mr. Quarles, New President of A.I.E.E., Urges Engineers Keep Pace With Times

The American Institute of Electrical Engineers has a big job ahead of it in keeping abreast of the interests of members and potential members in this "atomic-fission, supersonic, electronic" age, according to Donald A. Quarles, newly elected president of the A.I.E.E. Sandia Corporation's president, in a speech delivered last week in Minneapolis, Minn., where he was elected to the office of president of A.I.E.E. for one year, pledged a continued "broadening of our base to adequately cover the interests of the electrical engineering field." Mr. Quarles succeeds Dr. F. O. McMillan, head of the electrical engineering department, Oregon State College, whose term expires July 31,

Calling for unity in all the engineering professions, Mr. Quarles spoke briefly on the proposal that has been advanced for the formation of an American Engineering Association in which Electrical Engineering would be a constituent division and in which individual engineers would have individual membership. He pointed out that it was largely through the initiative of the A.I.E.E. that the matter of unification of the profession has been brought under active consideration by a group representing some 15 national engineering societies under the sponsorship of the Engineers' Joint Council. Mr. Quarles stated that he is strongly in favor of such professional unity, and that until such a unified organization can be formed he is not in favor of expanding the A.I.E.E. to the non-technical field.

In assuming the duties of president of A.I.E.E. Mr. Quarles will be the active leader of more than 40,000 electrical engineers throughout the world who make up the organization's membership. Since it was founded in 1884 the association



SONGSTRESS JACQUE QUINN, 4222, was the winner of the recent amateur talent show held at the Coronado Club. She's shown here singing and strumming one of the songs that won her \$25 first prize.

has faithfully lived up to the objects set forth nearly three quarters of a century ago: "the advancement of the theory and practice of electrical engineering and of the allied arts and sciences, and the maintenance of a high professional standing among its members." All branches of electrical work are represented in the membership, which includes engineers, consulting engineers, professors of electrical engineering and engineering executives of electric lighting, railway, telephone, telegraph, radio, power and manufacturing companies, and other persons interested in the advancement of electrical engineering.

Among the many distinguished presidents of the A.I.E.E. were: Alexander Graham Bell, inventor of the telephone; Charles P. Steinmetz, of General Electric Company, pioneer in alternating current theory; Arthur E. Kennelly, outstanding transmission engineer; Michael I. Pupin, inventor of the loading coil; and Dugald C. Jackson, expert on railroad electrification.

Bell System Employees Who Have Been President of A.I.E.E. Alexander Graham Bell

John J. Carty, then Vice-President of Research and Development, A.T.&T

Frank B. Jewett, former President of Bell Telephone Laboratories

Bancroft Gherardi, Vice-President and Chief Engineer,

Harry P. Charlesworth, formerly
Executive Vice-President of
Bell Telephone Laboratories

Wm. H. Harrison, then Vice-President of A.T.&T., now President of International Telephone and Telegraph

Company
Harold S. Osborne, Chief Engineer of A.T.&T.

Blake D. Hull, then Chief of Engineering, Southwestern Bell Telephone Company

Donald A. Quarles, President of Sandia Corporation and Vice-President of Western Electric Company. (Takes office Aug. 1, 1952.)

Attending the Minneapolis meeting with Mr. Quarles was H. C. Biggs, 2122, chairman of the Northern New Mexico Section, A.I.E.E.

#### NEWS FROM KOREA

From far off in Korea with the Signal Corps Alonzo F. Nelson, formerly of 2334-1, writes the Bulletin to supply his new mailing address. He reports that he is a radio repairman on a radio relay team and has been in the lines for about three months, but is expecting to be back in reserve in a few more weeks. After about nine more months in Korea the former Sandian expects to be rotated back to the States and is looking forward to taking up his old job with Sandia Corporation.



Vol. IV, No. 14 SANDIA CORPORATION, ALBUQUERQUE, N. M.

E, N. M. July 4, 1952

#### Welder Escapes Toe Injury Thanks To Safety Shoe

Erwin Smith, 2124-4, dropped a 60pound angle plate on his toe last week. The next line should read something like this, "The toe was amputated the



Erwin Smith

next day and Erwin will be in the hospital for several weeks."

Luckily the story doesn't read that way and the only reason it doesn't is because Erwin was wearing safety shoes.

Erwin is a welder and it was while he was setting up a job that the heavy angle plate fell off the 30-inch high job table, the sharp corner of the 60-pound plate digging into the toe of Erwin's safety shoe.

"I've been wearing safety shoes since 1938 and this is the first time I've dropped anything on my foot," says Erwin, "but all the years I've worn them have been well worth it. I've had this pair since last December and besides saving my foot, they pay off in wear."

#### Wastebasket Fires Caused by Careless Ash Tray Emptying

About 30 per cent of all fires are caused by careless smokers, according to statistics. And many of these fires come from emptying ash trays into wastebaskets. This has happened several times recently around the plant, but no damage has resulted.

#### Deep Sea Fishing Good — So Is the Rescue Mission

Eleven venturesome fishermen from Salton Sea Test Base in California recently went deep sea fishing off the coast of California. The sport was good, but was cut short when the fishermen turned rescuers when they found another fishing craft in distress.

The "far-west" Sandians chartered a boat in San Diego and went out on the Pacific for the day. Fishing was good they reported and before noon they had caught 90 barracuda, sea bass and bonita.

The sport ended when they spotted six fishermen in a small boat which was taking water. They got them aboard and then towed the smaller craft back to San Diego.

Don Fifield 2483, Eddy Frith 2483-2, and Art Carey 5214-4 had the best catches of the day with Don leading in the number of fish caught and Eddy bringing back the largest fish, a sea bass.

Others on the trip were George Cheeseman 2483-2, Ralph Marrs 2483-2, Burnice Workman 2483-2, J. K. Hulsey 2483-2, Boatswain's Mate Ward USN, Vern McNabney 2482-2, Delore Roberts 2482-1, and Chester Corrigan 2482. Also in the group were Bob Reese, a Westmoreland rancher, and Vern Nicols, a friend of the men in the group.

#### Politics and Cookery Subjects of Booklets

"May the Best Man Win," your guide to the political conventions, is now available in the booklet racks. You'll get a good slant on just how the two major parties select their candidates at the national conventions. The Republicans start their meeting next week, so get your copy soon.

Back yard barbecue fans (and who isn't) will find plenty of good advice and handy recipes in the booklet "Outdoor Cookery," which goes on the racks next week. There are some fine ideas for inexpensive entertaining and simple plans for making your own outdoor fireplace or grill.

#### July 4 Holiday Has Dangers For Cars, Forests

The Fourth of July weekend is here and tonight "the starting gun" will sound for the trek to the mountains. There are two cautions we'd like to extend to our fellow workers:

- 1. Drive carefully
- 2. Prevent forest fires

The roads will be crowded this weekend so mind your speed, check your tires, stay awake and be cautious. The National Safety Council has released some grim figures about the forthcoming highway toll. If you want to be frightened read them. It might be a good idea to read them anyway.

New Mexico forests are dry as tinder again this year and already several fires have ravaged timbered areas. Forest Rangers predict that 1600 Sandia families will take to the woods this weekend and they have issued a plea to put out camp fires, leave a clean camp, and protect our forests.

#### Several Employees Enter Service As Others Come Back

Several Sandians have entered military service recently and several others have returned to work with the company after completing their service.

It's into the Marine Corps for Jimmy Conlon, 4132. Jimmy left us recently to become a leatherneck. He'll train at Quantico and Paris Island for several months and emerge a brand new second lieutenant.

Van Edsall, 4152, is another Sandian who has left for the Service. Van was recently recalled into the Navy.

The Air Force recalled two other Sandians last month. They are Lee R. Crawford, 2142, and Rodney D. Stambaugh, 2222-2.

While these men were leaving to enter the service several former Sandians came back to us after serving their hitches with the armed forces. Leonard J. Goodell has been reinstated in 2461 after serving with the Air Force 188th Fighter Interceptor Sanadron

Reinstated in 2542 after a time with the Air National Guard is Kenneth D. Smith and back with us after leaving the New Mexico National Guard is Michael J. Sylvester, 2452.

# Reclamation Is a Real Business at Sandia

In the operation of Sandia Corporation, as in most large businesses, there is a big opportunity for the reclamation of obsolete or worn out material. In our company we have an organization which does just that thing—save materials which you might think would be consigned to the scrap pile. The Reclamation Department puts them back into productive use in the plant or disposes of them through salvage sale.

You can judge how successful these methods have been when you realize that \$60,000 to \$100,000 worth of material is returned to use within the Corporation every month through a variety of reclamation channels.

And that's just within the Laboratory. Every year many more thousands of dollars are recovered from items that are disposed of to other AEC contractors, private industries, or private individuals. In the last fiscal year \$15,000 was taken in from small cash sales alone at the department's declassified scrap yard. Most of these sales were made to employees.

Heading the Reclamation Department is Dave Miller. Assisting him are Bob Lemm in the technical and disposal division and Frank Baczek who handles the warehousing division. Through the hands of these men and the many people who work with them

More pictures of Reclamation work on Page 3



Dave Miller

pass about 18,000 different types of items. Reclaiming them involves two basic methods: dismantling or melting.

If the item is absolutely useless to the Corporation as it stands it is melted down, poured into ingots and returned to commercial channels.

If it has parts that can be reused even though the item as a whole is useless, it is dismantled and the parts are returned to use within the Corporation, transferred to other AEC contractors

or sold to employees or junk dealers.

A fascinating facet of the dismantling process is the recovery of the precious metals that are used to plate many parts. These metals include gold, silver, platinum and palladium and it's the department's job to see that they aren't wasted. The department succeeded in this to the tune of \$23,000 returned for gold alone during the past fiscal year. This gold went to precious metals storage.

At the same time as the actual processing of the material is going on the department has people busy keeping track of it all. They know every minute where each of the items comes from and why, how much of it there is, and where it is during every step of the processing.

This is not an easy job when you realize that about 1,000,000 pounds of scrap metal was disposed of by the department during the last fiscal year.

As a matter of fact none of it is an easy job. Their work comes under the heading of making something out of nothing too often for it to be anything but a tough job, but while finding a home for an ingot of aluminum may not be a romantic occupation it still carries a challenge to the men and women of the Reclamation Department, and it represents a tidy saving to the taxpayers of America.



Friday, July 4, 1952

Published for the employees of Sandia Corporation, Albuquerque, New Mexico

Editor, Robert S. Gillespie Assistant Editors, William A. Jenkins, Joann Hillard

Photography by Photographic and Reproduction Division

The Sandia Bulletin is published every other Friday. Contributions should be mailed to The Bulletin, Employees Service Office, Building T-301. News items should be in The Bulletin office at least one week in advance of publication date.

Telephone Ext. 25253



#### Don't Depend on a Rabbit's Foot

The M.P. held up his hand and blew his whistle, but the bicycle rider charged across the intersection as cars converged upon him from both sides. A squeal of brakes, a few muttered invectives and it was over without the rider being maimed or killed, but the cost might have been high.

A woman darted across F Street to reach a waiting ride on the other side, and a motorist watching the car ahead which had started to move, started up just in time to bowl the lady to the ground. The damage was a skinned knee and a ruined pair of hose, but for a moment her life hung in the balance, against the reaction time of a driver.

These two incidents occurred at rush hour recently. Similar narrow escapes are reported every day. The evidence in the cases cited indicates a lack of caution on the part of cyclist and pedestrian. There is no reason to assume that these groups of wayfarers are always in the wrong, but there's a powerful argument in favor of extra caution on their part—they're a lot more vulnerable to injury in a collision.

With these factors in mind the M.P.s have been warning bicycle riders that they are to observe the same regulations as those applying to other modes of transportation. The whole traffic control system is based upon faith — faith in the signals of a traffic policeman, in posted signs and in the integrity of the other driver. If the actions of any individual or group tend to shatter that trust, then it's not long before the system goes to not

The congestion around the Tech Area at hours makes it imperative that extra care be taken to avoid a mishap. If you are driving keep a reasonable interval between your vehicle and the one in front of you. Even if someone mistakes this gap as an invitation to pull into line from a side street, you won't be any later getting home and the other fellow will think you were being courteous. Courtesy and caution are blood brothers in the family of safety rules every sensible person knows and observes.

Rosalie Gallegos, 2534, toured the coast of California during her recent vacation. While there she visited her brother prior to his going overseas

Congratulations to C. W. Campbell, 1920, on the June 22 birth of his daughter. Mary Catherine tipped the scales at 6 pounds 8 ounces.

They had a grand time in Dallas in spite of the heat, according to Mickey Russell, 2236. Mickey and her husband attended the National Convention of the Office Machine Dealers.

Richard Dean Howard, 7½ pounds, is the latest addition to the household of John Howard, 2412. The son was born June 21 at the Presbyterian hospital. Congratulations, John

A visit with his parents has taken Guy Woodruff, 2221, to Wichita, Kans., for his vacation. Plans also include some fishing and just taking it easy, according to Guy.

Personnel in 1222 are glad to see Don Skinrood back to work after his recent illness.

Congratulations to Rambert Rivera, 2221-1, on the recent birth of his daughter, Carole.

Betty Johnson, 3153, will join her husband in the rod and reel brigade at Red River over the long week end.

Joe Hegge, 5313, and Barbara Hegge, 3150, will join Edgar Stein, 5313, and his wife for a July 4th week end at a ranch near Hondo, N.M. The ranch is the home of a former Sandian, Betty Schrecengost, previously a member of 1524.

Villacitos Lake and vicinity in Colorado is the location of a fishing vacation for L. B. Jolly, 2125, and his wife, Jeanne, 3153, accompanied by their children. Jeanne hopes to complete a few oil paintings while away.



AN OCEAN HOLIDAY which could be called a honeymoon was enjoyed by Adrienne Goff, 2531, and her husband Emerson. Adrienne calls it her honeymoon although they have been married 10 years. They visited New York and Savannah, Ga., where this picture was taken.

When Ed Clark, 5141, installed a new cooler in his home recently, he couldn't get over the fact that it seemed warmer than ever. After several days he discovered that it had been running with such force that it had caused the furnace heating system to turn on.

Allan Beck, 5141, and his wife are announcing the birth of a son, David Allan, born June 2, weight 8 pounds 15½ ounces. They also have a daughter, Ellen, 13 months. Congratulations, Allan!

The Strances, Elvina, 5141, and Edward, 2232, are entertaining his father and mother from Oil City,

Lillian Sichler, 5141, is sporting a new 1952 light green Ford around the base.

Colorado is unusually beautiful this year, according to **Kurt Schikowski**, 2536. Kurt recently returned from touring Arizona and Colorado.

# AROUND THE DEPARTMENTS

James Courtin, 2124, and Jeanne Courtin, 3153, enjoyed a trip to Phoenix, Ariz., last month, stopping en route for a visit to the Petrified Forest. They left their daughter in Phoenix where she is vacationing with her grandparents.

Bruce W. Butler, son of Charles M. Butler, 3152, and Gertrude Butler, 3153, left for Navy boot training in San Diego last Monday. Bruce was graduated from Highland high school last month.

Congratulations to Floyd Keeport, AEC, on the June 23 arrival of a daughter. Carol Elizabeth weighed in at 7½ pounds. Mrs. Keeport (Dorie) was formerly with 2422.

The Schlahtas, Jim, 3152, and Jo, 2222, are spending three weeks in Aliquippa, Pa., where they are visiting their family homes . . . AND Forbes Field, says Jim, ardent baseball fan.

Manuel Bolton, 2124, and Margie Bolton, 3152, left last week for Texas where they will vacation in Graham and Gainesville, accompanied by their small son. Their little daughter will return with them after spending a month with her grandmother.

The son and daughter of Jean Colbert, 3153, returned last week end after spending a month with their grandparents in Memphis, Tenn.

Reuben Barwick, 4232, and Olive Barwick, 3153, planned to leave last week end for a California vacation, acompanied by their son and the family dog. Olive said they may turn up in Tennessee, but according to the plans as she knew them the itinerary called for Los Angeles and San Francisco.

Visiting Mata Dugger, 3153, over the long week end will be her father and mother from Denver, Colo.

Congratulations to C. W. Hicks, 5413, on the birth of a son. Lawrence Edwin arrived on June 17.

Walt, 2124, and Phyllis, 3000, Perkowski spent the week end in Carlsbad, N.M. The occasion was a reunion with Walt's parents, brothers, sister and their families. This was the first time the six children had been home at the same time in fifteen years.

Don Hesselbarth, 2124, and his family just returned from a vacation in Kansas City, Kans.

The "gang" in 2121 had a farewell 1 arty for Jim Conlon who is leaving for the Marines this week. The affair included a big cake and coffee.

Luis T. Garcia, 2142, and his family spent two weeks vacation in Silver City with his brother.

A profitable vacation was spent recently by M. P. Bell, 5415, working on the two rooms he is adding to his house.

The Cave of the Winds and Pikes Peak are on the schedule for Helen Sanchez, 2416-1, during her Colorado Springs vacation. Before leaving Helen announced that she planned to take life easy and do some swimming.

After planning, working and more planning E. J. Smith, 2124-4, has finished his patio and porch. Now he says he's ready for those barbecues and evenings of relaxation.

A vacation taking care of her new grandson is on the agenda for **Thelma Carpenter**, 2443. Harry Louis weighed in at 6 pounds 2 ounces recently and Thelma reports that he is "just perfect."

Her sister from Pennsylvania is visiting Mary Lanza, AEC.

Bob Hopper, 2440, and his family are spending their vacation in Mississippi. Bob's plans included consuming a full quota of Mississippi catfish.

After a wonderful vacation in North Carolina and Georgia, Ward Hunnicutt, 2441, reports being glad to be back where it's cooler. Ward caught some two pounders while fishing in the eastern part of Georgia. His father accompanied them back to New Mexco and flew home after a short visit.

Fellow workers are hoping to see Warren Buck, 2234, feeling like his old self again after his recent injuries sustained in a softball game June 24.



YOU CAN BE COOL if you do as Burl Alsup, 2417, and his son Jerry did. They went to Wolf Creek Pass in southern Colorado and posed for this picture in the snow. Seven and a half year old Jerry thought it was great and so did Burl.

There are two new papas in the 2120 department. Clifford Richardson, 2126, was passing out cigars in honor of a daughter. Name—Viola June. As for Chuck Taft, it's a boy that weighed 7 pounds 3 ounces. Name—Charles Richard.

Organization 1900 enjoyed a dinner-dance at the Coronado Club on June 26. The barbecue dinner was served on the patio and Don Lesman's orchestra played for dancing. There were about 280 personnel and guests present.

John Wichelns, 1922-2, is spending his vacation near Chicago. He and his wife, Maureen, attended the wedding of her cousin in Pana, III.

Little Dale Finders just got a new baby sister, Mary. She arrived weighing 5 pounds 1 ounce and the proud father, Kenneth Finders, works in 2443. Congratulations, Ken!

Sightseeing, horseback riding and big, wonderful steaks were all enjoyed by **June Kelly**, 1922-2, and her family during their vacation. They visited on her aunt's ranch in Litch

A vacation spent partly at home and touring the Grand Canyon is on the agenda for Joseph Toulouse, AFC

Part of her vacation time was spent camping with her husband, Hobart, according to Helen Covey, 2222-3. The remainder of the time was spent at home relaxing and working around the house.

Two weeks in Sedalia, Mo., provided a pleasant vacation for Floyd Tate, 2222-3. Floyd was accompanied by his wife, Vera, and their son, Jimmy.

New Jersey, Florida, New Orleans and St. Louis were all visited by Roseanne Bascom, 2220, and her husband, Eddie, during their recent vacation.

Personnel of 2351 celebrated the birthdays of the month with a cake on June 25. Honored were Jim Grier, Frank Chavez, Johnnie Garcia and Bob Kronberger.

Florence Bland, 2351, and her husband, Joe, have just returned from a two week vacation spent in Seattle, Wash. They returned by way of Southern California.

A weeks vacation was enjoyed by Walter J. Norris, 2232. Walt reports working around the house and picnicking in the mountains with his family.

There's a proud new home owner in the heights. Ben Joyola, 2232, and his family have just moved into the new place at 904 S. Paloma.

Baton Rouge, La., was the vacation spot chosen by Ernest Parker, 2232. Ernest visited relatives while there and enjoyed his specialty of seafoods.

There's a proud new papa in 2232, Ormand Williams has a daughter as of June 17. Sharon Lee weighed in at 6 pounds 4 ounces.

Fellow workers in 2232 are hoping for a speedy recovery for Paul Carlson. Paul has been ill for some

Sam Apodaca, 2232, reports enjoying his recent vacation very much. Sam visited friends and relatives in San Antonio.

There's a new grandpa in 2234. W. Eskridge has been button-popping over a new grandson, born to his daughter recently in Tucson, Ariz.

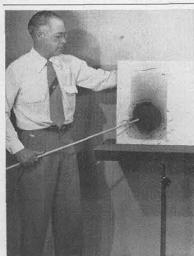
It's off to Colorado for Phil Dailey, 2233, and his family during their vacation. Resting, relaxing and sightseeing are on the agenda.

Two people from 5131 are due back from their vacations on Tuesday. Mary Lou Fresquez went to Miami, Fla., with her mother and sister on the two week trip. Herman Williams motored to Jamestown, O., with his wife and two daughters to visit his family.

Ruth Maxwell, 5131, flew to Virginia for her vacation trip. Although she admired all the greenery there, she says it certainly felt good to get back here and away from the heat and high humidity in the East.

Bob Buehler, 5132, spent his vacation acting as scoutmaster of Boy Scout Troop No. 188 at Camp Zia near Cuba, N.M.

Vacation time will take Vernon Theiles, 2234, to Toledo, for a visit.



A FIRE HAZARD is pointed out by Ted Rosenwald, fire prevention specialist in 2450. He shows a piece of Celotex wallboard which was scorched by a hot-plate. The wooden shelf under the wallboard also was charred, but the potential danger was discovered before the wood burst into flames. Ted urges all employees to be fire prevention conscious for as he says, "Our job is too important to be stopped by carelessness."

#### MORE

### AROUND THE DEPARTMENTS

After driving his new Ford to his home town in Springfield, Mo., for a vacation, Pete Doty, 2124-4, says it's nice to be back in Albuquerque where it's cool.

Personnel of 2100 say it's nice to have Ruth Hunt, receptionist, back on the job after her recent illness. They report missing Ruth's ready smile while she was gone.

A visit with relatives and friends took Ralph Brenamen, 2124-4, to York, Pa., during his recent two week vacation.

A tour through the western states was enjoyed by Frank Shea, 2123-2a. Frank reports that it's mighty good to be back in Albuquerque.

Lucille Stamm, 2225, and her husband, John, accompanied by their three children, spent a vacation recently in Illinois, Kentucky and Oklahoma.

The unbearable heat in St. Joseph, Mo., cut Ray Brunacini's two week vacation VERY short. Ray, 2222-3, expected to be gone two weeks but after only one day in the Missouri town he hurried back to Albuquerque.

Congratulations to Craig Summers, 2222-2, and his wife, Ruth, on the birth of a daughter. Susan arrived on June 25.

Her vacation had some unexpected events, according to Marcy Lee Rodekohr, 2221-1. When Marcy checked in at El Rancho En Cantado in Durango, Colo., she discovered that the moving picture, "Naked Spur", was being made nearby. During her visit Marcy met Janet Leigh, Tony Curtis, Jimmy Stewart, Robert Ryan, and several other Hollywood stars.

Frank Foss, 2221-1, his wife and baby spent two weeks vacationing in Toledo, O.

Department 1710 held a party recently at the Coronado Club honoring Robert Burd, 1712, and Harold Hodges, 1716.

Oklahoma, Missouri and Colorado were the vacation stamping grounds recently for Zona Hamm, 1716.

Returning from a vacation in Topeka, Kans., and Denver is J. P. Johnson, 5411.

Her home town of Detroit, Mich., was the place selected by Gerry Hahn, 2416-1, for her two week vacation. Gerry reports that the main feature of the trip was the wedding of a special friend. She says that she predicted the event when she left Detroit two years ago.

Recently returned from a Denver, Colo., vacation is Al Wells, 5411.

Plans for Edna Fowler, AEC, include a restful vacation at home.

It's good to see **Dave Miller**, 2350, back to work following his recent illness.

A weeks visit with her parents took Marie Babcock, 2352, to Lubbock, Texas. Marie made the trip by plane.

A visit with relatives recently took Rio DePew, 2535, and his wife to Jowa.

Congratulations to Leo Reynolds, 2533, on the June 1 birth of a son. William R. weighed 8 pounds 13 ounces.

Martha L. Barker, 1710, left last week for a vacation at her husband's old home town in Oklahoma, with her parents in Iowa, and in Colorado. Her daughter Judy went to Oklahoma earlier to spend some time with her grandparents.

Betty L. Moore, 1710, returned last week after a vacation in Oklahoma, Nebraska and Colorado. Her son, Jerry, remained in Oklahoma at his grandparents for the rest of the summer.

The artistic Walter Hook, 1714, is spending his vacation in and around Albuquerque where he'll probably spend a lot of time sketching the scenery for his famous paintings.

"HOT," is Everett Gilman's report on the weather in Des Moines during his vacation in the tall corn state. He's in 1714.

Robert A. Knapp, 1716, left last week end for a fishing trip in Colorado. Good luck, Bob!

With a full schedule of eating, sleeping, swimming and horseback riding, Marcella Dunkelberger, 2410, will be busy from daylight 'til dark during her vacation at High \*Point, N. C.

IN REPLY REFER TO FILE NO. 5851-9

FEDERAL SECURITY AGENCY SOCIAL SECURITY ADMINISTRATION

BUREAU OF FEDERAL CREDIT UNIONS 201 Norman Building Dallas, Texas

June 13, 1952

Mr. A. H. Spengeman, President Sandia Laboratory Federal Credit Union Box 5800, Sandia Base Albuquerque, New Mexico

Dear Mr. Spengeman:

We are pleased to enclose Examiner Howard S. Fox's Report of Examination for the period ended April 30, 1952. The report indicates that your credit union is continuing to progress nicely, and that its operations are being carried on in a very satisfactory manner. Please accept our compliments on these notable accomplishments.

We are sure the officials will continue to make it possible for the members to enjoy the very best thrift and credit services through your credit union. We know the members will be appreciative of this fine service.

Please let us know if you have any questions or comments concerning this report. It will be appreciated if you will sign and return the attached receipt form at your earliest convenience.

Very truly yours,

Buyond B. Lausgood Buford B. Lankford Regional Representative

Enclosures

CONGRATULATIONS were extended to the Sandia Federal Credit Union by the Bureau of Federal Credit Unions following the April 30 audit. The above letter from the Regional Representative was received by A. H. Spengeman, President of the credit union. The audit shows that on April 30 the credit union had total assets of \$129,582.92.

#### Making Useable the Materials Which Might Be Thrown Away--That's Reclamation Work



FRESH FROM THE MOLD hot aluminum ingots are laid out on the foundry floor to cool. In the center foreground Bob Lemm, 2352 supervisor, talks shop with John Samuelson while Laddie Sladek, left,

knocks the ingots out of molds. In the background is the small tilting potless furnace used to melt down lead, tin bronze, brass and zinc. Operating this furnace is Judson Santos.

#### Sympathy

Sympathy is extended to the family of Donald Winger who died June 18 when the private airplane he was piloting crashed. Don, who was in 1312, had been employed at Sandia since January, 1949, and was a native of Cedar Rapids, Ia. He is survived by his wife and four children.

It is with sorrow that we hear of the death of Arthur Bowland, 2545, in Chicago June 19. Funeral services and interment took place in Pawtucket, R. I. He is survived by his wife and one son.

Sympathy is extended to Roy Auge, 2123-6, on the recent death of his brother.

Sandians extend their sympathy to Romayne Davis, 1712, who was called to Santa Ana, Calif., last week by the death of her father.

#### Sandia Radio Club Has 608 Contacts During Field Day

Sandia Base Radio Club scored high in the Field Day sponsored by the American Relay League recently in making 608 contacts. Total tabulation will be completed in a few weeks and the Sandia Club hopes to rank among the highest in the West Gulf Division of the organization.

Three stations run by 15 operators were used by the club this year as compared to four stations in 1951 when they made 420 contacts.

# Cancer — You Can Do Something About It!

Cancer strikes one in five people. Last year in the United States there were 215,000 deaths due to cancer.

This is not intended as a "scare" article, but one to bring us all a realization of facts which we must face and to tell you of something which can be done to reduce this unpleasant situation. Remember that at the same time—in 1951—70,000 lives were saved by early detection and treatment.

#### Dangerous Tumor

Let's discuss just one form of tumor—cancer of the breast. This is the most frequent form of cancer. It occurs in women in more than 99 per cent of the cases, and is resi onsible for nearly 20,000 deaths a year. Again, early detection and treatment can easily reduce this number by one-half.

It is unfortunate that early cancer of the breast is painless because pain would be a sign that something was wrong. However, the only sign is the presence of a lump. The majority of lumps in the breast usually are discovered accidentally while bathing or dressing. The health habit of breast self-examination doesn't leave this discovery to chance. As a result of periodic selfexamination of the breasts, breast tumors (lumps) as small as threeeighths of an inch may be found. This compares with breast tumors of about one and three-quarter inches. Early treatment will result



ROWS OF INGOTS are stacked in the declassified scrap yard where most of the salable material reclaimed by the department is stored. The yard is open to the public on week days from noon to 1 p.m. A platform of aluminum ingots is stacked by fork lift operator Rawlin Russell, 2351.



A BUSY OFFICE houses the heart of the warehousing division, 2351, headed up by Frank Baczek on the phone in the background. On the left is Charles O'Connor, receiving and issue section leader. Foreground is Mary Armbrust and right is Florence Bland.

in more than double the number of cures than are now possible. It should be noted that all lumps in the breast are not cancer, in fact. non-cancerous lumps are much more frequent than those due to cancer, but every lump in the breast should be called to the attention of your doctor.

#### Yearly Check-Up

A yearly check-up by your doctor along with the monthly habit of breast self-examination is the surest way of detecting cancer in the early stages.

Self-examination is only as effective as the thoroughness in which it is done. There has been developed an examination procedure which has proven itself to be adequate and the technique is quickly and easily learned with a few minutes instruction. Personnel in the Medical Department know the procedure and will gladly explain it to women employees.

Dr. F. G. Hirsch reports that in 1951 six cases of breast cancer were discovered by the Medical Department in the course of routine examinations of employees. All six were in the early stages of development and the patients were referred to outside doctors and the cancerous growths were eradicated.

# Early Diagnosis Increases Probability of Cure With EARLY With LATE Diagnosis BREAST OON (CUREO) 3550 CERVIX 7000 (CUREO) 1550 SKIN OSNO (CUREO) 1550 CANCER CONTROL IS UP TO YOU ACT NOW

Cancer, detected in early stages, has a greatly increased chance of cure, the American Cancer Society points out. Your best protection is a thorough physical examination once a year.

# We Seek Answers to Many Questions With Nuclear Tests in Nevada Desert

Blazing forth in newspapers of the country during the past months have been news stories telling of the tests of nuclear devices (more commonly but not always accurately referred to as atom bombs) in the Nevada desert. The newspapers have told of the large numbers of civilians and of the thousands of troops which have participated in these tests.

#### Work Side by Side

Most of us know that Sandia Corporation has provided manpower for the tests. Many of our engineers, scientists and technicians have worked side by side with men from other AEC installations to make these tests fruitful to our govern-

Before telling about a few of the Sandia people who have helped with the tests in Nevada it might be well to talk about the tests themselves. Why are these tests needed? According to test scientists, field nuclear detonations are conducted to determine specific facts which cannot be learned from small-scale laboratory experiments or from the work of theoretical scientists.

That is why the AEC has its two proving grounds for these nuclear devices. The test grounds, one at Eniwetok Atoll in the Pacific and the other in Nevada, are used to test varied types of nuclear

#### Backyard Workshop

It was determined in 1949 and 1950 that the nation would need more frequent tests than were feasible for the remote Eniwetok test area which was established after the war. Our scientists needed a backvard workshop where they could quickly mount and conduct a test without the expenditure of months of time and without waiting until those months passed before they learned if the whims of nature agreed with their laboratory calcu-

Thus the continental test program was launched and Nevada Proving Grounds developed early in 1951. The first test series, Operation Ranger, was held there in the spring of 1951. Then came the Buster-Jangle series last fall. Now tests can quickly be scheduled and much more economically in both money and manpower than was possible in the Pacific. Devices to be detonated at the Pacific test grounds are those which the AEC believes not adapted to Nevada because of public safety and other factors.

The Nevada Proving Grounds, where Sandians have spent many hot and cold days and nights, is about 16 miles wide and 40 miles long. Camp Mercury, which is at southern extremity of the, grounds, can house approximately 2350 people. It has housing units, cafeterias and mess halls, warehouses, and other buildings to accommodate the residents. A short distance away is Camp Desert Rock, where military personnel participating tactically in the tests are quartered. Other military members of

the test organization are housed at Mercury or at Indian Springs AF Base, 24 miles east.

#### Desert City

Located about 22 miles north of the camp is the Control Point for the tests. On either side of the point are Yucca Flat and Frenchman Flat where the firing areas are located. Serving the camp, control point and firing areas are approximately 100 miles of paved roads, 110 miles of power lines, 225 miles of telephone and communication lines and 2,200 miles of signal lines.

In this highly developed area several thousand men combine their efforts in a closely coordinated pattern to carry out tests which are becoming so commonplace that the nation's press has relegated short items concerning them to the inside pages of the papers.

Let a report of the Joint Information Office at Las Vegas tell you what must be done to conduct a nuclear test, and you will see why the men who do the work are important.

'The Control Point at Yucca Pass is the brain - the nerve center - of every test operation at Nevada Proving Ground. From the control point radiate the myriad of communication lines and channels required for receiving information and transmitting orders to control such an operation.

#### Control Is Big Job

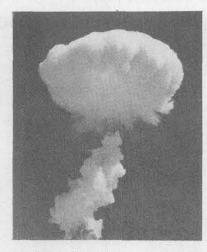
"In a given test there may be as many as 50 aircraft employed for various purposes. . . . The control of so many planes with so many jobs over a few square miles requires the utmost reliability of communications. Men and equipment for this purpose are available at the Control Point.

"Beyond this control of this operation there is also the control of the many experiments themselves. There are filaments to be turned on; power must be applied to many circuits; camera shutters must be opened and closed at exact moments; ultra fast as well as normal movie cameras must be started; blast proof doors must be secured; some lights must be turned on and others turned off. These and hundreds of similar details must be taken care of without fail in proper order and at predetermined times in order that the desired information be obtained.'

Man-made instruments do the recording of the effects of the blasts. The men behind the instruments are the heart of the tests and here we'd like to tell of the work of a few of the Sandians at the Nevada Proving Grounds.



AT THE CONTROL PANEL is Earl Shannon. Highly developed communications systems are necessary to coordinate an operation such as a Nevada Proving Ground nuclear test.



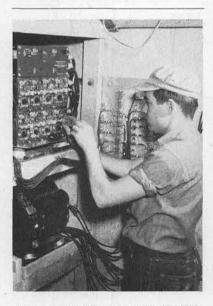
The Familiar Mushroom Cloud

The most spectacular part of a nuclear detonation after the original blinding flash and the shock waves is the cloud which rises many thousand feet over the spot where the device was detonated.

For more pictures of Sandians at Nevada Proving Grounds see Page 5.



THE CALIBRATION TRAILER is the scene of operations here as Sgt. Ron Meinert, left, and Robert Thompson work on a pressure standard. Instruments were continually adjusted and tested to keep them in top condition.



THE UNITED STATES NAVY worked with Sandia Corporation in Nevada. Here Radarman First Class William Payne adjusts amplifiers in a recording shelter.



MAINTENANCE of equipment was a steady job for the men in Nevada. Larry Witt is pictured here as he works on timing relay equipment.

# Men from Sandia Help Make up Team Which Runs Nevada Test Operations

Several score Sandians under the direction of G. A. Fowler, Director of Field Testing, were in Nevada working on the recent nuclear tests at the Proving Grounds. Engineers, scientists and technicians from Sandia Corporation joined forces with representatives of Los Alamos Scientific Laboratory, other Contractors of the AEC, and the Army, Navy and Air Force to stage these vital tests.

#### Sandians Supervise

Reporting to Mr. Fowler is Harlan E. Lenander, 5230, Manager of Sandia Corporation's Proving Ground Department. E. F. Cox, manager of the Weapons Effect Department, 5110, is the scientific advisor for the Sandia-sponsored portions of the tests.

Security regulations of course prevent a complete reporting of the accomplishments of the Sandians and their co-workers at tests such as those held near Las Vegas. Much of the knowledge gained by these tests must be carefully guarded from potential enemies of this country. And in doing so even friendly ears must not hear the full fascinating story of research which is unprecedented in human history.

However there are a few phases of the Nevada work which can be told. They make a story which reveals the ingenuity, resourcefulness and curiosity of modern day scientists - and the miracles they perform.

#### Is It Practical?

Take for example the process of determining whether or not a nuclear test is practicable. Tests are not feasible if, for example, the resulting blast might cause serious damage to buildings in the surrounding countryside. Dr. Cox, as a member of the advisory panel for the tests, helped make such decisions with data prepared for him by men from Sandia. Here's the way it

Stationed at the Nevada Proving Grounds was the United States Air Weather Service which provided forecasts of air temperatures, wind speeds and wind directions for the time of the next nuclear detonation. This information was studied by men in 5242-3 and translated into blast velocity statistics. Heading this section is Herbert J. Plagge and working with him are Al T. Marrs, Sgt. Gale Walton and Capt. Jack Reid. Both of the latter were on detached service with Sandia from the USAF. The blast velocity information was turned over to Dr. Cox and the advisory panel.

Before each nuclear detonation at the Nevada Proving Grounds, men in Division 5233, under Ron S. Milliken, went into action and provided information from which Dr. Cox could make predictions of what would happen at various points throughout Nevada and Utah when the explosion occurred.

At one hour and two hours before the time of the test 2400 pounds of TNT was detonated and through studying the resulting blast waves it was posisble to predict what direc tions the blast waves from the nuclear detonation would go and how strong they would be when they struck certain inhabited areas. To do this it was necessary to set up stations in various locations which would record the effects of the TNT blasts. These stations were capable of measuring pressures as low as one millionth of one atmosphere.

#### Micro-Barograph

The installation, operation and servicing of this equipment was the job of the men from Sandia Corporation. These micro-barograph stations were located in Goldfield. Las Vegas, Henderson, Boulder City and Caliente, Nevada, and St. George, Utah. The station in Goldfield was manned by Sgt. Sherman Hummer USA; Las Vegas, Sgt. Wilbur Mandrell USAF; Henderson, Sgt. Dexter Greenleaf USAF; Boulder City, Edward J. Newman 5215-4 and Charles Simpson 5215; Caliente, Raymond Stevens, 5233; and St. George, Electronics Technician Carl Kelso USN. The Army, Air Force and Navy men in the stations were on detached service with Sandia Corporation The initiation of the micro-barograph program in Nevada

was under the direction of Robert Bunker, 5233.

Bill Gustafson was project engineer for the micro-barograph work for the spring operation and he and his men installed several truckloads of instruments at the six stations. In charge of placing and servicing the communications equipment at the stations was Greg Abeyta, 5211, and working with him were Tom Long 5214, K. D. Stout 5211, A. K. Trammel 5211 and T. A. Vance 5211.

The men at the micro-barograph stations relayed their findings to the control point after the TNT detonation. The results were interpreted by E. F. Cox. The information was then relayed to the Advisory Panel and they used it with their other accumulated facts to decide whether the tests should go on as scheduled.

#### Size and Weather

The information relayed by the micro-barograph stations to the Control Point was important for it drew a picture of what damage a nuclear test could do at various distances. Two things control this distant damage effect of a testthey are the size of the device and the weather. The latter is surprisingly important for these Sandians have discovered that the detonation of the same amount of TNT five weeks apart, fired at exactly the same place and at the same time of day, produced blast strengths ranging from one unit to 3200 units when measured at a certain location. The only thing that was different was the weather

Also important in performing the tasks which faced Sandians in Nevada were the jobs of the men in charge of details necessary in preparation of the tests. H. S. Schwartzbaugh was in charge of engineering liaison between the organizations doing the planning of the tests and the contractors doing the work for the AEC. Charles O'Keefe, 1933, had the responsibility of administrative work for the many Sandians who spend much time at the Nevada Proving Grounds.

For the air drops, James Scott, 5233, was project engineer responsible for electronic instrumentation of the Sandia experiments. On the tests which detonated the nuclear device on a tower, Francis E. Thompson, 5233, was project engineer doing electronic instrumentation of a classified nature for

#### Tower Tests

On both air drop tests and tower tests Byron F. Murphey and his Division 5111 were designers and in Sandia's tests.

C. E. McCampbell and the men in 5225-1 had the task of making classified electronic measurements which required personnel to be in the aircraft as well as at stations on the ground.

Acting as a liaison man between Sandia Corporation people at Nevada Proving Grounds was L. J. Vortman who planned and coordinated the operations with the AEC.

These men, and many others who have not been mentioned, took part in the tests in Nevada. For some it was a new experience and for others it was a job which they had done four times before. But each test opens the door of the mysteries of nuclear experimentation a bit wider. Scientists, engineers, technicians are at work at the Nevada Proving Grounds and at the laboratories throughout the nation and with their searching minds we are finding the answers to the unknown.

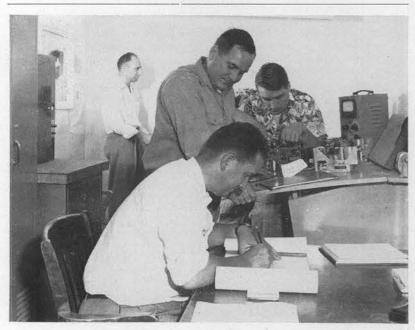
These are the men we find at our country's Nevada Proving Ground.



# Life in Nevada Sandians at Work on The Proving Grounds

THE CONFERENCE ROOM in one of Sandia Corporation's field test trailers was the center of much activity. Here three Sandians wrestle with a problem of the moment. L to R: Harlan Lenander, G. A.

Fowler and George Reis.



A TRAILER WORKSHOP is home base for Sandians while at the Nevada Proving Grounds. Here Ron Milliken, rear far left, feeds the electric print dryer and Robert Thompson, seated in the foreground, studies a chart. Looking over his shoulder is Arnold Finchum and working on an electronic device is George Bell.



READY FOR WORK which will take them into a shelter following a nuclear test are Carl Csinnjinni, Emery Whitlow and Electronics Technician Korbe, USN. They are wearing the protective clothing developed by radiological safety monitors.



SANDIA'S BASE CAMP is in the foreground and "News Nob" is in the rear. It was from the other side of this hill that men from the nation's press saw a nuclear explosion.

#### Promotion

JOHN P. CAVANAUGH has been promoted to section supervisor of



4133-1. He joined the Laboratory early in 1950 following graduation from Drake University where he earned his B.A. degree in economics. John is a veteran of four years in

the Army. Before entering the service he worked for nine years with Swift & Co., Des Moines, Ia., as head of the billing section.

#### New Employees

A welcome is extended to the following new employees who joined Sandia Corporation between June 11 and June 23:

· · · · · · · · · · · · · · · · · · ·	
James A. Bridge Leo C. Moersen Arthur R. Engquist David J. Nutt Charles D. Vail William G. Polakowski Edmund G. Franzak Donald G. Ehr Alfred E. Winblad Emil G. Kadlee James A. McHenry William R. Barton Denvel L. Tippit James D. Manweller Charles E. Smith, Jr. John W. Martin William H. Cross Andrew M. Imrisek William C. Clark William P. Stearns Donald E. Gregson Walter Zimmerman Warren B. Ballard Paul R. Corbett Wilbur V. McGuire Raymond J. Reasner Burrell R. Snelling Hedley C. Strudley Gordon R. Zahm Howard T. Bowman John R. Strzelczyk James P. Gallagher Helen N. Hansen Elio Cultreri Hubert A. Stewart Robert G. Tant Edward E. Lister Jean C. Bemis Russell M. Leahy Nicamor Gonzales Dorothy E. McAbee Carroll R. Davis Gwendolyn Roberts Arlene J. Armbruster Gomesindo Lopez John Bashaw Robert E. Fair William F. Stinnett Paul E. Haddon Leon B. Hobbs Louis E. Doherty Theo J. Chauveau John C. Abeyta Joe G. DeBaca Jane B. Letcher Corrine L. Hein Henry H. Passmore William R. Widner Ruth Yrene Olivia V. Geffe Wallace C. Nott Jean B. Berry Dare K. Kibble Max D. Hodge Earl H. Simonson Lavon W. Burrell Barbara C. Caine Johnnie E. Johnson Lavon W. Burrell Barbara C. Caine Johnnie E. Johnson Lavon W. Burrell Barbara C. Caine Johnnie E. Johnson Lavon W. Burrell Barbara C. Caine Johnnie E. Johnson Lavon W. Burrell Barbara C. Caine Johnnie E. Johnson Lavon W. Burrell Barbara C. Caine Johnnie E. Johnson Lavon W. Burrell Barbara C. Caine Johnnie E. Johnson Lavon W. Burrell Barbara C. Caine Johnnie E. Johnson Lavon W. Burrell Barbara C. Caine Johnnie E. Johnson Louise S. Winner Mary L. Eisenschmidt Margaret A. Hautrer Marley M. Newsom Ralph G. Glaser, Jr. Melvin H. Brock Clarence E. Ingersoll William Gross John A. Beyeler Lawrence B. Smith William E. Andrews Robert E. Fox Robert E. Fox Robert E. Fox Robert S. Pinkham, Jr. Elwin L. Checketts Edward R. Hollade Edward R. Hollade Robert E. Fox Robert S. Pinkham, Jr. Elwin L. Checketts Edward R. Hollade Robert E. Fox Robert S. Pinkham, Jr. Elwin L. Checketts Edward R. Hollade Robert E. Fo	.1211
Arthur P. Enganist	1243
David I. Nutt	1281
Charles D. Vail	.1311
William G. Polakowski	.1311
Donald C. Fly	. 1311
Alfred E. Winhlad	1321
Emil G. Kadlec	.1321
James A. McHenry	.1322
William R. Barton	.1322
Jenvel L. Tippit	1322
Charles E. Smith Ir	1513
John W. Martin	. 1531
William H. Cross	. 1532
Andrew M. Imrisek	1532
William C. Clark	1540
Donald E. Gregson	1540
Walter Zimmerman	.1541
Warren B. Ballard	1547
Paul R. Corbett	1714
Raymond I Resener	2122
Burrell R. Snelling	2123
Hedley C. Strudley	.2123
Gordon R. Zahm	.2123
Howard T. Bowman	2123
John R. Strzelczyk	2126
Helen N. Hansen	2141
Elio Cultreri	2142
Hubert A. Stewart	. 2232
Robert G. Tant	.2234
Edward E. Lister	. 2234
Puscell M Looky	2333
Nicamor Gonzales	2421
Dorothy E. McAbee	.2461
Carroll R. Davis	.2461
Gwendolyn Roberts	2461
Arlene J. Armbruster	2464
John Rasham	24/2
Robert E. Fair	2481
William F. Stinnett	2532
Paul E. Haddon	2532
Leon B. Hobbs	2532
Theo I Chauveau	2534
John C. Abevta	2541
Joe G. DeBaca	.2542
Jane B. Letcher	3151
Corrine L. Hein	2152
William R. Widner	3160
Ruth Yrene	.3160
Olivia V. Geffe	. 3171
Wallace C. Nott	. 3222
Dave K Kibble	4131
Max D. Hodge	4135
Earl H. Simonson	.4135
LaVon W. Burrell	.4151
Barbara C. Caine	4222
Louise S. Winner	4222
Mary L. Eisenschmidt	.4222
Margaret A. Mentz	.4222
Marilyn Murray	.4222
Betty J. Wright	.4222
Kita A. Haubert	5110
Walter A. Harrison	5112
Stephen Luchter	.5141
Raymond V. Smith	. 5143
Edwin C. Stimpson	. 5215
Ralph G. Glaser Tr	5215
Melvin H. Brock	5221
Clarence E. Ingersoll	.5225
William Gross	.5233
John A. Beyeler	.5233
William F Andrews	5242
Robert E. Dunlan	5243
Andrew R. Durand	.5243
Robert E. Fox	.5313
Robert S. Pinkham, Jr.	.5313
Elwin L. Checketts	5421
Wallace P Finley	5431

#### AEC New Employees

AEC New E	mployees
Katherine Anesi	. Operations Branch
Stanley A. Friend	Operations Branch
Rhinehardt W. Heuer.	. Operations Branch
Ova A. Royal	Security
Helen E. Gelwicks	Communications
Irvin C. Reinitjes	Operations Branch
Vaughn E. Myers	Operations Branch
Lela M. Vaughn	Operations Branch
Hubert R. Lay	. Operations Branch
Martha To Tohnson	Security



THE WEATHER gets hot in Nevada and Jim Scott, project engineer for Sandia tests, checks an adjustment on a recorder.

"The Great A-Bomb Robbery"

# Fantastic Intrigue Started When a Chemist and Scientist Met in 1944

By Bob Considine .

Fourth Installment

"An hour of more momentous significance to the U.S.S.R. than Stalingrad or the defense of Moscow." Thus does Bob Considine, in the following article, describe the meeting of two insignificant men on a New York suburban street in 1944. This is the fourth of eleven articles telling how Russia stole the secrets that enabled her to make atomic bombs.

Many of the world's foremost woes and fears date from an inconspicuous meeting of two humble-looking intellectuals on a seamy street in suburban Woodside, N.Y., one evening early in 1944.

From one direction strolled a roundish, flabby little Philadelphia chemist named Harry Gold. Under an arm he carried a green-bound book. If there was anything unusual about him it was the pair of gloves rolled tightly in his right hand, like a chubby baton.

From the opposite direction walked a pale wiry man in his late 30's, blinking solemnly behind his horn-rimmed glasses. His clothes were of the stiffly imaginativeless goods of war-time England, but on the street which he now trod—to the eventual despair of all free men—he melded into the air of shabby gentility. In his hand he carried, half-concealed, a tennis ball.

#### Traitors Meet

The symbols of recognition being unmistakable, both men paused. "I'm Raymond," Harry Gold, a

"I'm Raymond," Harry Gold, a document-running courier for the communist spy apparatus for the previous 10 years, whispered.

The other man, faintly aloof as he studied Gold, said clearly, "I am Dr. Klaus Fuchs." He walked on with Gold (whom he was to know only as "Raymond") at his side.

It was an hour of more momentous significance to the U.S.S.R. than Stalingrad or the defense of Moscow. From that hour and that meeting—the culmination of fantastic intrigue—the Kremlin could move firmly toward the creation of an atomic stockpile which emboldened it to make its stupendous postwar aggressions against the free world.

Fuchs' path to that infamous meeting place had been a devious one. It was a path marked by milestones as obscure as campus riots at Kiel University in Germany to marking posts as distinct as mighty agreements reached by Roosevelt and Churchill at Quebec a year before.

Fuchs, at that meeting, had behind him a life which will be studied for generations to come by psyhcologists, psychiatrists and criminologists—for his own subsequent confessions, six years later, appear too juvenile to shed serious light on the events which motivated one of history's top crimes.

#### Becomes Communist

He was raised in a pious atmosphere and happy family. His father, a well-liked extrovert, was a Lutheran Pastor who became a Quaker. Klaus, the youngest child, was showered with attention. Behind the meekest demeanor, and in a sickly body, he developed a curious superiority complex. But no one denied, first at Leipzig University and later at Kiel, where his father was Professor of Religious Science, that Klaus was not only bright but brave.

He joined a Communist youth organization and, in the early 1930's, agitated openly in behalf of Hitler's Nazi Party. It was his first brush with intrigue on the grand scale. German Communists, it is generally forgotten, were strongly pro-Hitler on the ground that he and his party had the best chance of unseating the Weimar Republic—after which the Communists would take over from the Nazis as the parent party had seized Russia from the moderate Kerensky government.

Hitler, of course, out-intrigued the German Communist plot by burning the Reichstag and commencing his

purge of the Reds on the ground that they were the arsonists.

Fuchs ducked underground and became a cog in a Communist group dedicated to protecting key workers from Hitler's wrath. But after a time he was ordered to leave the country in order to complete his schooling—against the day when Germany woud become a Communist country and scientific Reds would be needed.

#### British Intern Fuchs

In Britain he shone at Bristol University (Doctorate of Philosophy in Mathematics and Physics) and at Edinburgh University (Doctorate of Science). The Carnegie Foundation awarded him a research fellowship. When the war broke out he was interned and sent to Canada, along with many other enemy aliens. There he is chiefly remembered as one who constantly complained because his keepers would not supply him with newspapers. More subtly he formed a violent hatred of Britain for interning him—a known loather of Hitlerism.

By 1942 he was back in England and had accepted a teaching post at the University of Glasgow. In June of that year he was assigned to secret atomic work, became naturalized, took the solemn oath, and made immediate contact with a Communist espionage ring to deliver to it such information as he could acquire. At first he turned over only his own findings and theories, then those of associates.

The hatred of the Nazis for this man was such that some time after his return to Britain Joseph Goebbels sent to British security officials, via Switzerland, a dossier on Fuchs' Communist activities in Germany as a student. But the British ignored the information, along with other dossiers sent, on the ground that it was but part of a continuing Nazi effort to "split the allies."

#### Fuchs Not Investigated

Fuchs' contributions to the fund of Soviet atomic knowledge could only have been meagre during his immediately subsequent two years of work in Britain's atomic research program.

But during that period a step of tremendous portent had been taken at Quebec by the President of the United States and Prime Minister Churchill. Fuchs and the U.S.S.R. were to be two notable beneficiaries of that step.

Roosevelt and Churchill entered into a pact at Quebec whereby security officers of the Manhattan Engineering District (the A-Bomb clearing house) and the F.B.I. would accept accredited British scientists and technicians—sent here from England to work—without further loyalty checks.

The British were to have full authority over their own. Of Fuchs, their security report had said, "He will never become a foreign agent." He and certain other British team members were among the few top scientists connected with the A-Bomb effort who were never "tailed" by M.E.D. security police bent not only on protecting them from possible kidnap or injury but also interested in noting their off-hours associates.

Thus Fuchs was welcomed into a land and an operation which possessed all then known about processing and refining uranium-238, extracting uranium-235 (explosive) by the gaseous diffusion and other bizarre methods, the theories relating to the construction of an atomic bomb, and other information so advanced that in all probability it has still not been shared with our closest allies.

Fuchs' arrival in this country in December, 1943, though completely unheralded so far as the American people were concerned, changed U.S. and world history for many generations to come.

(Next issue: Fuchs and Gold in operation.)



#### Classified

Classified advertising is printed in the Sandia Bulletin as a service to Sandia Corporation employees and employees of the AEC on Sandia Base. There is no charge for publishing the advertisements. They must be submitted in writing and contain the name and base telephone extension of the advertiser. Each advertisement will be run one issue.

#### FOR SALE-

Electric range, 1949 deluxe Norge with glass window in oven door, \$150; 1948 Hotpoint 8.3 cu. ft. deluxe refrigerator, \$150. Both in excellent condition. Walker, ext. 29142 or ext. 6176 after 5.

Lawn mower, 18" cut, noiseless type, chrome plated, new condition, cost \$37.50, sell for \$25. (Trade value on power mower); Speedy Sprayer, W. R. Brown Co., complete with 1/3 H. P. motor, internal mix gun with container and external mix hose type gun. Guaranteed used one time only, \$35. Watkins, 3091 36th Place, ext. 25272 or 21142.

Walnut dining room suite, 8 pieces — 6 chairs, table and buffet, \$75. Don Weldon, ext. 4267. May see at 3305 Hastings Dr., Alb. 5-8855.

Boxer pupples, beautiful fawn, registered and highly pedigreed. Reasonable. 39 Perimeter dr., Wherry proj., James Shu-

Davo-bed, western type, with chair, ottoman and coffee table. Good condition, 885. David Winner, ext. 62181, 512 S. California.

Davenport, chair, end tables, coffee table, two lamps. R. E. Reed, 900 S. Arizona.

Dalmatian puppies, AKC registered. Sire and Dam winners in Albuquerque show. 2 males, \$50. 2 females, \$75; G. E. "Tidy" vacuum cleaner, 1950 model, apartment size, with attachments, \$25. James Hann, 2541 W. Canderalia Rd., Alb. 4-4706.

English bicycle, boy's, three speeds, hand brakes, small tires, good condition, less than 1 year old, \$40. L. J. Biskner, ext. 23278.

1946 Indian Chief motorcycle, 80 cu. inch. Good condition, \$300. Alb. 6-0286 or 5-4085.

Franciscan headboard, solid oak, \$35.
Hollywood type springs, mattress and legs, \$35; Royal Silent deluxe typewriter, \$45. All items in excellent condition. Don Skinrood, ext. 22173.

Mankin home, 3 bedroom, dining room or den, large kitchen, walled yard, lawns, flower box, walks, patio. Balance loan approx. \$8800. Lane W. Peterson, 1008 S. California.

Home freezer, 4½ cu. ft., \$85; Dejur 8 mm projector, like new, \$90. L. A. Kueker, ext. 31240 or Alb. 5-7916.

Baby high chair, Teeter Babe, training chair, all three for \$10. 3062 - 34th st., Base. Wilson Pollard.

G. E. washing machine, good condition, \$40. See at 325 S. Utah or call Alb. 5-3429. Outboard motor, 3½ H. P., Firestone, \$65;

Outboard motor, 3½ H. P., Firestone, \$65; 1936 Chevrolet sedan, running condition, \$75. Alb. 7-9033.

Spinet piano, mahogany finish in exceptionally good condition. Cost \$800 new, will sell for \$400 cash. Alb. 5-6719.

Wright air conditioner, 1500 cfm capacity,

Wright air conditioner, 1500 cfm capacity, portable, with circulating pump. Used 1 year. \$45. Alb. 2-6578.

1942 Chevrolet Fleetline, tan, radio, heater, visor, spotlight, side-view mirror, seat covers, good engine, \$400 or reasonable offer. Jack W. Reynolds, ext. 7238 or Alb. 5-4253.

Emerson 16" oscillating fan; 16" lawn mower; all aluminum tricycle. Art Johns, ext. 24296.

Hoffman home, 3 bedrooms, 134 baths, asphalt tile in bedrooms, bath and kitchen. Wall to wall carpeting in living room, dining room and hall. Central heat, air conditioning, patio, lawns in both front and back. Barbecue fireplace, swings, walled in yard. Must sell. Alb. 5-663 or ext. 26245, T. E. Dadian, 2619 Flower St.

Coleman Port-A-Camp stove and cabinet, completely equipped, one year old, like new, \$25. C. H. DeSelm, Alb. 5-2634.

Living room suite, 2 piece, \$50. Staley, 5516 E. Roosevelt, Alb. 5-6616.

Hollywood double bed outfit, heavy duty innerspring mattress, 60 coil bed spring and metal frame on casters, good condition, \$15; Hollywood twin beds, 2 strong steel

bed frames with 7 in. legs and casters, \$4; fiber rug, straw colored, 9 x 15, reversible, very clean, \$5; 6 drawer gumwood chest with plate glass mirror, \$5; bamboo lattice shades complete with pulleys and cord, 6, 4, 3 ft., fine shape, \$6. Blythe, 4770 E. Southern, Alb. 6-0461.

Universal vacuum cleaner, deluxe tank type, 14 months old, \$40. All attachments included. C. L. Crossen, ext. 31274.

'41 Oldsmobile, living room suite, 4 piece.
Both for \$200. Woodrow Lerke, ext.
33136.

Zeiss Ikonta "C" camera, leather carrying case, four filters, sunshade. All in new condition for \$50. W. E. Baker, ext. 29250 or 26190 after 4:30.

House, large 3 bedroom in north valley.

Many built in extras plus permanent soft water installation, blinds, drapes, garden and etc. Located on 1/3 acre corner lot, paved streets. S. G. Pike, Alb. 4-6088.

Stake trailer, 2 wheel with new tarp, license, hitch, all less than 1 month old, \$125; Allstate motor scooter with windshield and wind break, perfect condition, less than 1 yr. old, \$175; 45 cal. automatic, \$40; pop-up toaster, \$10. F. Grosvenor, ext. 7276.

Tires, 4 Firestone 6.70-15, good tread, never

Washing machine, Speed Queen, wringer type, good condition. First \$25 offer takes it. Can be seen at 538 N. San Pablo, Ray Sanchez, ext. 25245.

Norge refrigerator, 6½ cu. ft., \$35. Alb. 5-2640.

New domestic sewing machine, enclosed in blond mahogany desk, all attachments, \$190. Alb. 3-7151.

Upright piano, rebuilt by Simpson, \$250; 6'x9' walnut brown broadloom rug, very good condition, \$25; man's lightweight bicycle (Columbia), \$32.50; 16' mower (Craftsman), \$12.50; wool sleeping bag and air mattress, \$10; Argus reflex camera and case, used very little, \$12.50; portable ice box, \$3; gateleg maple table just refinished, \$45. Dewey, ext. 33184.

#### TRADE—

Lot on Charleston for anything of equal value. Everett Smith, ext. 33236.

#### WANTED-

Home for female black cocker, spayed. Not good for small children. Call Alb. 6-3637 after 5.

Riders, 2 or 3, to Indianapolis. Leaving Aug. 29, will return in two weeks. Call E. H. Baber, ext. 29153.

Will buy 400 ft. of 4' to 5' hog wire and posts. Chris Hensley, 1652 Del Norte Dr.

#### RIDE WANTED-

1630 E. Grand or 1600 block of E. Central to North tech gate. Dorothy Pittman, ext. 4236.

2503 N. La Veta, Cleo Smith, ext. 29140 or Alb. 6-3285.

N. Rio Grande and Chavez, Jean Berry, ext. 29140.

700 block on N. Jefferson. F. L. McFarling, ext. 33133 or Alb. 6-2941.

1652 Del Norte Dr. to south tech gate. Chris Hensley.

Alameda to south tech gate. Oscar Berlier, Alb. 4-3838.

His recent vacation took Leroy Huenefeld, 2442, to North and South Carolina, and to his old home town in Ohio. The Huenefelds report that their drive through the Great Smoky Mountains in Tennessee was one of the most beautiful they had ever seen

#### Tough Luck for A Fisherman Is Week's Sad Story

Every once in a while you run into one of those days when it would definitely have been better if you'd "stood in bed." John Christopher, 2334, had one of those days not too long ago.

John and his wife woke up on a Saturday morning recently all set for a day's fishing. They packed their car, got an early start, and drove 175 miles to Eagle Nest. It was after they arrived and got ready to fish that John realized he'd neglected to bring his fishing license. For the rest of the day he sat on the bank and watched his wife fish. While he watched she caught a beautiful 12-inch trout.

#### Bowling Pins to Be Sold by Club

Wanna buy a bowling pin?

The Coronado Club has a couple of hundred of them for sale, 25 cents apiece or six for \$1. They're all solid maple wood and with a little trimming and polishing a man who's handy with tools and has a bit of imagination could turn them into a variety of useful objects such as lamps or salad plates.

They're being sold by the Club because nicks and gouges have thrown them out of balance. Those wood working enthusiasts with an eye for a bargain may purchase the pins by contacting the Club at ext. 24145 or 24148.

#### Chess Champ Will Appear at Club

Jimmy Phillips, the unofficial state chess champion, will lecture and compete at the next meeting of the Albuquerque Chess Club Friday, July 11. The chess players will convene at the Southern Union Gas Co., Hospitality Room, 7:30 p. m.

# Swim Meet, Fish Fry, Western Dance All Slated for July at Coronado Club

A teen-age dance will start off another month of activities at the Coronado Club Saturday night. The dance for youngsters will begin at 8 and last 'til 11 p. m. with the Club providing refreshments.

A new event, Barbecue-Bingo, will be initiated on the 9th. Preceding the regular Bingo games a barbecue supper will be held in the patio

#### Let's Dance

There will be dancing to juke box music at the Coronado Club each night of the week when there is no other club function it was decided at a recent meeting of the Board of Directors.

An area will be cleared in the dining room adjacent to the bar lounge for dancing. Music will be heard through a dining room loudspeaker.

at \$1.50 per person. If the event is successful it will be repeated at Bingo on the 23rd.

A buffet dance will be featured Sunday, July 13, with Charlie Biesel providing the music. The price? \$1.75 as usual.

On Saturday, July 19, it'll be a western attire affair with Doc Savage and his orchestra whooping it up.

The popularity of Men's Night has been increasing by leaps and bounds and there's no doubt that it will reach a new high on the 24th when Dr. W. R. Lovelace, II, just back from Korea, presents an illustrated talk. This famous physician from Albuquerque is one of the most traveled men in the country.

Again Men's Night will feature free beer, pretzels and popcorn with guests being charged 50 couts.

The final event of the month, on the 27th, will be a combined swimming

# Fight for Lead in Softball League Gets Hot as Second Round Nears End

The battle for first place honors in Sandia Corporation softball league tightened up as play in the league approached the last week of the second round. Jim Schlahta's Senators from 2542 overtook Johnnie Robinson's league-leading Cubs from 2545 by beating them decisively last week 14-8. The Senators now are out in front by half a game.

#### End Postponed

Today was scheduled to be the last day of second round play. Several postponed and make-up games remain to be played, however, so the second round will not end until next week. The third round will begin July 14.

The 1300 team managed by Tom Ginther dropped out of the league a week ago. Their place has been taken by the Security Guards from 2452

Don Webb of the 1200 Indians turned in a beautiful one-hit no-run pitching exhibition as his teammates collected 12 runs off of Bob Eisele's 1951 Browns, in a game played June 16.

The Browns also took it on the chin in their next two contests, losing to the Senators 17-15 on June 17, and to the Pirates 33-25 on June 19 in a run scoring marathon. Vince Millilo, Tom Corrigan and John Campbell homered for the Browns but innumerable errors by their

teammates nullified their batting punch.

#### Braves Sweep Ahead

Ward Hunnicutt, just back from a North Carolina vacation, spear-headed his "southern Yankees" to an early lead over the 2452 Braves. The Security Guards, however, caught fire in the last inning and squeezed by Ward's lads 18-16. The Yanks are still looking for their second win of the season.

After spotty fielding had let the Browns get away to a 10-2 lead, Athletic hurler Ken Gillespie cracked down while his teammates surged back to take a 21-11 victory. Homers by George Hildebrandt, Gillespie and manager Ray Pierotti helped 1230's cause along. Bill Gambrele and Vince Millilo got hold of round trippers for the defeated Browns.

In a "run and fumble" contest the 1200 Indians eked out a 13-12 win over the 2233 Tigers on June 24. Highlight of the game was a sensational catch by Arthur Pino, Tiger centerfielder, of a line drive hit by Lee Schulz.

meet and fish fry. The swimming meet, for which prizes will be awarded, will start at 4 p. m. The fish fry will start at 7 p. m. with a charge of \$1.50 per member.

Also during the month bridge instruction will be given on these dates: 7, 17, 21, and 28. Duplicate bridge will be held on the 17th and 31st.

Square dances this month are on the 11th and 25th. Square dance and folk dance instruction will be on the 22nd and 29th.

#### Race Close for First Place in Golf Competition

With two weeks to go in the first round of Corporation Golf League play it looks like a tight race for first place in both flights

Flight A has three teams tied for first place with two teams one game behind tied for second place. Any one of the five teams could take the lead and win the next two weeks.

In Flight B teams 2 and 5 are outdistancing the field. Team 2 has the advantage going into the final two weeks, but it's still nip and tuck with team 5 close on their heels.

After the first round of play the top five teams of each flight will go into one flight and the remaining 10 teams will make up the other flight, according to Chet Fornero, 1924, recently elected president of the league.

In late July a tournament with Los Alamos will be held. Plans are being made by the tournament committee composed of Bob Angus, Ed Willet and Jack Quirk.

Standings as of July 26 are as follows:

#### Flight A

Team 3, Fornero, Snyder, Johnson, won 14, lost 7; team 5, Williams, Hicks, Morehead, Cowan, won 14, lost 7; team 8, Jones, Rich, Kuehne, won 14, lost 7; team 2, Book, Morrison, King, won 13, lost 8; team 7, B. Kelly, T. Kelly, Crab, won 13, lost 8; team 4, Kidd, Cocke, Skinrood, won 10, lost 11; team 1, Horne, Deutschle, Cavanaugh, won 9, lost 12; team 9, McCrimmon, Price, Vogel, won 8, lost 13; team 6, Porter, Adkins, Massey, won 5, lost 16; team 10, Hook, Irving, Gregory, won 5, lost 16.

Flight B

Team 2, Dadian, Angus, Willet, won 19, lost 2; team 5, Classen, Bush, Sharp, Cowan, won 17, lost 4; team 3, Quirk, Sampson, Ryan, won 14, lost 7; team 10, Walker, Chavez, Delaney, Nelson, Sullivan, Flanner, won 12, lost 9; team 1, Johnson, Trachel, Ladanye, won 10, lost 11; team 8, Dzugan, Fellows, Jenkins, won 9, lost 12; team 6, Smith, Halloran, Kruse, won 8, lost 13; team 9, Logan, Horne, Jr., Weller, won 7, lost 14; team 4, Robertson, Eifert, Puhara, won 5, lost 16; team 7, Curran, Kimbrough, Campbell, won 4, lost 17

#### Team Standings

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Name	Won	Lost	%	
(Senators)	12	2	.857	
(Cubs)	12	3	.800	
(Giants)	10	3	.769	
(Pirates)	10	4	.714	
(Indians)	9	5	.643	
(Tigers)	5	8	.385	
(Athletics)	4	7	.364	
(Browns)	4	11	.270	
(Braves)	2	12	.142	
(Yankees)	1	14	.067	
	(Senators) (Cubs) (Giants) (Pirates) (Indians) (Tigers) (Athletics) (Browns) (Braves)	(Senators)     12       (Cubs)     12       (Giants)     10       (Pirates)     10       (Indians)     9       (Tigers)     5       (Athletics)     4       (Browns)     4       (Braves)     2	(Senators)     12     2       (Cubs)     12     3       (Giants)     10     3       (Pirates)     10     4       (Indians)     9     5       (Tigers)     5     8       (Athletics)     4     7       (Browns)     4     11       (Braves)     2     12	



IT'S PARTY DAY for members of Job's Daughters, Bethel No. 3. These young girls, children of Sandia employees, spent the afternoon recently at the Coro-

nado Club swimming pool and then went to a progressive dinner at the homes of several members. Their mothers did the cooking and the girls had a good time.